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LIST OF ABBREVIATIONS

BEA	–	Boundary Element Analysis
DSP	–	Digital Signal Processing
DTS	–	Digital Theatre Systems
DML	–	Distributed Mode Loudspeaker
EBP	–	Efficiency Bandwidth Product
ESL	–	Electrostatic loudspeaker
emf	–	Electromotive force
FEA	–	Finite Element Analysis
GMSs	–	Giant Magnetostrictive Materials
HRTF	–	Head Related Transfer Functions
LPM	–	Linear parameter measurement
LEAP	–	Loudspeaker Enclosure Analysis Program
NXT	–	New Transducers Ltd
SNR	–	Signal-to-noise ratio
SW	–	Subwoofer
TS	–	Thiele-Small
TRF	–	Transfer Function Measurement

LIST OF SYMBOLS

A	—	the absorption of the material (m^2 Sabine)
α_n	—	absorption coefficient of the actual surface
c	—	speed of sound
dB	—	Decibel
E	—	the Young's modulus (or modulus of elasticity)
f	—	frequency
γ	—	the gas constant equivalent to the thermodynamic ratio of specific heats
p	—	quiescent gas pressure
ρ	—	density of gas/material.
R	—	the absolute temperature of the gas
S_n	—	area of the actual surface (m^2)
RT_{60}	—	Reverberation Time
λ	—	wavelength
k	—	Wave number
Hz	—	Hertz
μ	—	micro
G	—	Giga
Pa	—	Pascal
F	—	Force
m	—	mass
a	—	acceleration
ϕ	—	phase
$g(t)$	—	harmonic variation of a quantity with time
c_{ph}	—	phase velocity
ω	—	angular velocity
η	—	transverse displacement

β	—	transverse rotation
B	—	bending stiffness
$v(\omega)$	—	bending wave velocity
T_{ij}	—	tensor
S_{ij}	—	strain tensor
ω_{ij}	—	rotation tensor
$d\mathbf{B}$	—	magnetic flux density
dW	—	magnetic work
dU	—	change of the internal energy
d_{33}	—	magnetostrictive constant
k_{33}	—	longitudinal coupling coefficient
SPL	—	Sound Pressure Level
f_s	—	free air resonant frequency of a driver
f_c	—	resonant frequency of a driver in an enclosure
Q	—	measure of the amount of control of a driver
Q_{TS}	—	Q of a speaker in free air
Q_{TC}	—	Q of a speaker in an enclosure
Q_{MS}	—	mechanical Q of the driver
Q_{ES}	—	electrical Q of the driver
V_{AS}	—	volume of compliance
C_{MS}	—	mechanical compliance
S_D	—	cone area of driver
V_B	—	box volume
f_B	—	box resonance frequency
f_3	—	system cut-off frequency
L_v	—	length of port
R	—	port radius
F_c	—	Crossover frequency
R_T	—	tweeter's (or in this case, the midrange's) rated impedance in ohms
C	—	crossover series capacitance
R_W	—	woofer's rated impedance in ohms
L	—	crossover series inductance in henries
kOe	—	kilo-oersted

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